



# NATIONAL CENSUS TEST

**TEST DU  
RECENSEMENT  
NATIONAL**

Report No. 14

Questions 24 to 29: Education



**NCT RESULTS FOR EDUCATION VARIABLES:  
ANALYSIS AND RECOMMENDATIONS**

July 31, 1989

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## EXECUTIVE SUMMARY

Analysis of NCT tabulations and a selection of NCT questionnaires has revealed the existence of one major and three relatively minor problems with the education questions. The major problem occurred with the NCT version of the school attendance question, which underestimates full-time secondary school attendance, but over-estimated full-time attendance in the older population. It is recommended that the wording of this question be re-phrased in the present tense (as in the LFS) and that the response options be ordered according to the 1981 version. A minor problem was detected in a higher-than-expected rate of non-response to the elementary-secondary question. It is recommended that the response box description be made more explicit by stating that the number of grades or year is to be "Entered". A problem in the degree, certificate or diploma question was noted in an underestimate of secondary school graduates. It is recommended that the question be re-worded by stating "certificates, diplomas or degrees in that order, and that an explanatory clause be added explicitly mentioning secondary certificates. Finally, two very minor glitches were spotted in the major field of study question: one where the term "training" was excluded from the response box description, and a second regarding misleading wording of the residual box response. In spite of these problems, the NCT education module still generated estimates of education parameters that were in accord with the historical time-series (with the exception of school attendance).

## 1. Introduction

It is the purpose of this report to present the essential results of the 1988 National Census Test of the education variables and to provide recommendations for the final question wording for these variables. (The contents of this report are to be considered for internal Statistics Canada consumption; the NCT results presented herein are not to be construed nor quoted as estimates of population parameters).

There were six questions on education tested in the NCT and that are proposed for final inclusion on the 2B Census form. These questions are:

Q.24 Highest grade (or year) of elementary-secondary

Q.25 Years of university completed

Q.26 Years of other non-university completed

Q.27 Recent school attendance

Q.29 Degrees, certificates and diplomas

Q.30 Major Field of Study

Generally speaking, these questions were very similar to those asked in the 1986 and the 1981 Censuses. Some minor variations, however, were introduced in the NCT questionnaire. The first variation was in structural format. In 1986, questions 24, 25 and 26 were amalgamated into one three-part question, whereas in the NCT, they were separately numbered (as in the 1981 Census). A second change occurred in the elementary-secondary question where the instruction to "Enter" highest grade or year (1 to 13) of secondary or elementary school was removed. A similar set of changes occurred for the university and other non- university response boxes, where the term "Enter" was removed. A further variation occurred in Q.27, the recent school attendance inquiry. The NCT version removed a qualifier identifying the types of educational institutions used in the previous 1981 version and added a qualifier denoting courses which can be used as credits for secondary and postsecondary qualifications as the criteria to define school attendance. In addition, the order of the response options were reversed compared to the 1981 version. The rationale for this alteration was to prevent under-reporting of school attendance (especially at the secondary school level) which occurred on a large scale in the 1976 Census, and which occurred on a lesser scale in 1981 (and whose effect was further lessened due to an edit and imputation action undertaken in conjunction with a labour force activity question). The school attendance response option "no" was also expanded to read: "No, did not attend in past nine months" (past two months in the NCT).

Question 28 was slightly modified in the NCT in the form of a skip instruction for persons who reported "None" to the question "What degrees, certificates or diplomas has this person ever obtained?" In addition the phrase "or completion" was added to the response block for secondary/high school graduation certificate. Finally Question 29 on major field of study was revised to include the phrase "or Training" to encourage persons with vocational training to respond to this question. A second item that was changed was the residual check box was rewarded to "This person's highest diploma is a secondary/high school graduation certificate". This change accompanied the skip instruction in question 28.

## 2. Main Results

The main results from the analysis of the NCT data are summarized in Tables 1 to 5 in Appendix A. The first set of results summarized in Table 1 are those for the observed rate of non-response, defined as the complete lack of a response on the part of a respondent for whom the question was pertinent. The non-response rates varied from a low of 5% for the years of university question (Q.25) to a high of 11% to the elementary-secondary question (Q.24). Much of this high non-response rate for Q.24 was accounted for by a 19% level in the province of Quebec. For the remainder of the education questions non-response rates were within reasonable limits, with the slight exception of major field of study responses for trades certificate holders, particularly in Quebec. There,

24% of trades certificate holders failed to indicate their major field of study. Non-response rates were significantly lower for university qualifications, suggesting that the major field of study concept was interpreted by some respondents as pertaining to university studies only.

NCT data for the composite highest level of schooling variable are summarized in Table 2A, showing comparisons with the 1986 Census, as well as with results from a special labour force survey supplemental survey on a test of revised educational attainment questions administered in December, 1988. The LFS test was administered to one rotation group and basically expanded the current LFS educational attainment concept to include a measure of secondary school completion, trades certificates and greater detail for university qualifications.

For the most part, the NCT results are comparable to the 1986 and 1988. However, the NCT results differ substantially from the 1988 LFS Test results in one crucial aspect. In the LFS, the proportion of persons with secondary school graduation certificates (or "secondary school completion" as specified in the LFS test) and no further schooling was 21%, compared to 14% in the NCT and 13% in the 1986 Census.

The Census measure of secondary school graduation is derived from the degree, certificate or diploma variable (Q.28 on the NCT). This question has remained virtually unchanged since its inception into the Census in 1976. Given the above-noted contrast with the LFS Test question, it would now appear that we have evidence of a fairly sizeable underestimate of secondary school graduation resulting from the Census question. This interpretation is based on the assumption that the Census term "secondary (high) school graduation certificate or completion" is equivalent to the LFS concept of "completed secondary (high) school".

This interpretation is further strengthened by the number of edit failures occurring between questions 28 and 29 related to the number of persons reporting "None" to the enquiry on "What degree, certificates and diplomas has this person ever obtained?" and who at the same time checked the residual response box in question 29 indicating that "this person's highest diploma is a secondary/high school graduation certificate". The number of such cases was 412,000, notwithstanding the situation that for persons reporting "None", they were instructed to skip question 29 and to proceed to question 30. This 412,000 is thus very likely an underestimate of the downward bias in the number of secondary school graduates.

One plausible explanation for this downward bias can be found in the sequence of the question wording which identifies "degrees" as the first point of reference. There may be a tendency on the part of some respondents to fixate on the term "degree" and to assume that the question is asking for university qualifications or at the very least postsecondary qualifications. In the NCT, this situation is further compounded by the existence of the SKIP instruction for persons reporting "None". In other words, some respondents may not read all of the available response options and not realize that secondary school graduation certificates are a possible answer box.

A second possible source of confusion may reside in the term "graduation". There is some evidence from the LFS (in a previous LFS education attainment test - Dufour and Levesque, "Educational Attainment in the Labour Force Survey", Labour and Household Surveys Analysis Division, Staff Reports, April 1988) that the term "graduation" presented some problems for LFS respondents. They may have interpreted it to mean that they had to have participated in graduation ceremonies or exercises.

A third possibility is that persons with equivalency credits may not actually possess a graduation certificate but would actually have the qualification level required to enter postsecondary programs of study. It is also possible that the LFS test question may be overstating secondary completion, particularly if respondents do not want to admit that they are high school drop outs. In any event, it would probably be safe to say that the true value for secondary school graduates lies somewhere between the Census NCT estimate and that of the LFS Test question.

A second anomaly that was observed in the questions on degrees, certificates and diplomas (Q.28) and major field of study (Q.29) was a slight over-reporting of responses to the residual mark box category for secondary school graduates without postsecondary qualifications. Approximately 290,000 persons with postsecondary qualifications marked the residual box stating that "This person's highest diploma is a secondary/high school graduation certificate". In retrospect, it would appear this formulation contains two semantic problems. First, the residual box description states that a diploma is equivalent to a certificate, which is not always true. And



second, the residual box description actually intended to indicate that this persons highest educational qualification or credential was a secondary school graduation certificate.

Table 2B summarizes the Highest Level of Schooling data in the 1986 Census and the NCT for Quebec. The distributions appear to be quite comparable, but the Other Non-university, No certificate category seems to have increased substantially. Part of this reflects a real increase as over 160,000 college students per year have been enrolled in Quebec CEGEPs over the 1987-88 and 1988-89 school years.

Table 3A and 3B summarize the Highest Degree, Certificate and Diploma data in the 1986 Census and the NCT for Canada and Quebec, respectively. Generally speaking, most of the observed changes were in the direction and magnitudes expected based on comparisons with flow data indicating the volume of postsecondary graduates at the various degree, certificate and diploma levels. The one exception occurred in the case of medical degrees which increased by 15,000, or 20% between 1986 and 1988. On closer examination of the NCT medical degree data it was ascertained that approximately 5% of the cases would have been edited out of the medical degree category. These were cases of persons whose major field of study was nursing and who had misinterpreted the medical degree category. The adjusted or edited counts are more or less in line with expectations.

Summary results for the School Attendance question (Q.27) are reported in Tables 4 and 5. These results indicate that the NCT version of school attendance is affected by two differing sources of response error. The first is evidenced by data comparisons with the November 1988 Labour Force Survey estimates of full-time school attendance shown in Table 4. This comparison indicates that, overall, the LFS estimate of full-time school attendance in the 15-24 year age group is some 8 percentage points higher than the NCT estimate. In the 15-19 year age group the LFS estimate is 19 percentage points higher than the NCT, whereas in the 20-24 year age group the NCT estimate is actually 2 percentage points higher than the LFS. It would thus appear that the NCT school attendance question undercounts approximately one-fifth of full-time students in the 15-19 year age group. The majority of this sub-population are secondary school students. This downward bias in school attendance is similar to the response problem that occurred in the 1976 Census school attendance question, where, again, secondary school students, but not postsecondary students, under reported themselves.

This interpretation of response error is further strengthened by the following two observations of NCT data. First an edit consistency check between question 27 on school attendance and question 39 on years worked since leaving school revealed that 227,000 persons had reported that they had not attended school in the past two months in question 27, but who had marked the check box in question 39 indicating that number of years of work experience was "not applicable, (because they were) full-time students". There are some problems accepting responses to the check box for question 39 as an unequivocal indicator of full-time student status. (For example, it seems that persons may have checked the box simply to indicate it was "Not applicable" for a number of reasons not necessarily related to full-time school attendance). However, there were a sufficient number of plausible cases, particularly in the 15-18 year age group where almost 70% of the edit inconsistencies occurred, to support the above interpretation.

The second observation supporting this contention appeared in the form of edit inconsistency cases entailing a number of siblings in the same household, some of postsecondary student age (ie 19 or over) and some of secondary student age (ie 15-18). These cases were identified by actual examination of NCT questionnaires. The typical scenario would be that the postsecondary aged siblings would have full-time school attendance recorded, but their younger siblings would be recorded as non-attenders (in spite of the fact that the question 39 box would be checked). In these cases, then, it appears that respondents are assuming that question 27 applies only to postsecondary schools.

A partial explanation of this could be the placement of the school attendance question immediately after the years of university years of other non-university questions. In 1981, the question appeared after the degree, certificate or diploma question and probably more important, explicitly mentioned elementary or secondary schools directly in the body of the question.

A second source of response error in the school attendance question appears to have resulted from an inversion of the order of the answer categories over that used in 1981. The rationale for this inversion was to counteract the undercount bias noted (but rectified through edit and imputation) in 1981. The evidence for this

interpretation is summarized in Table 5, comparing NCT results and those of the 1981 Census. The tell-tale clues of response error appear in a comparison of the absolute number and percentages of full-time students in the 45-64 and 65 and over age groups. According to this comparison full-time attendance rates more than tripled in the 45-64 year age group and increased by ten-fold in the 65 and over age group. These increases cannot be explained nor supported in terms of trends neither in the labour force survey information on school attendance for the population 25-64 years of age nor in annual school attendance figures compiled in the Education, Culture and Tourism Division. (ECTD).

According to the LFS, there were 231,000 full-time students 25-64 years of age in contrast to the NCT estimate of 340,000. Similarly, ECTD data indicate an incidence of 1,500 full-time student 50 years and over in 1981 and 3,700 in 1988. So clearly, an incidence of 54,000 full-time students 65 years and over in the 1988 NCT is not realistic. As previously stated, the inversion of the answer categories is the most likely explanation of the response error. In addition, the fact that in the 1981 version the first line of the question read: "Have you attended a school, college or university at any time since ...", whereas the NCT version read: "Has this person attended a school, college or university at any time ..." may have predisposed some NCT respondents to interpret the question simply according to the first line of the question, that is attendance at anytime, period. Further examination of these "older" students reveals that over three-quarters have less than secondary school graduation and none reported any level of university completion. It is, therefore, highly unlikely that the NCT figures represent plausible school attendance amongst senior citizens taking advantage of free tuition programs at Canadian universities.

### 3. Recommendations

Given the above analysis and identification of response problems in the NCT, it is recommended that questions 24, 27, 28 and 29 be reworded or restructured in order to remove the sources or the causes of the above identified problems. It should be emphasized that the recommended changes attempt to take cognizance of the response problems, but also at the same time an attempt is made to not introduce any further confusion or sources of response error. In any event, the suggested rewordings are quite minimal in the context of the entire six - question education module.

In brief, the recommended changes are as follows:

**Q.24** I would recommend that the term "Enter" be added to the answer box and that the answer box also should contain an explicit reference to "highest number of grades or years ..." (The suggestion to add "Enter" was also made in the NCT Interviewer Debriefing Report, Report No 4). In addition, an instruction qualifier stating "Enter highest number (1 to 13) of grades or years, excluding kindergarten" be added to the question space.

**Q.27** I would recommend that the school attendance inquiry be reworded by stating the reference period at the beginning of the question (as is done in the LFS and the 1990 US Census) and to reword the question in the present tense as in the LFS (ie "... was this person attending a school, college or university ? "). The question should also reinstate the parenthetical question qualifier used in the 1981 Census that identified elementary or secondary schools as well as the same ordering of response categories as in 1981.

Finally, the NCT qualifier for credit courses should be retained, but shortened to eliminate redundant wording.

One further consideration that should be applied to the school attendance question is the position sequence in the education module. In the NCT, it was positioned immediately after the years of university and years of other non-university questions and just before the degree, certificate and diploma and major field of study questions. It may be more appropriate to place it after the elementary-secondary inquiry since the majority of full-time students in the 15 and over population are secondary school students.

The U.S. Census questionnaire situates their school attendance inquiry before their educational attainment section. In the 1971 Census, the school attendance inquiry was the first one in the education module. Thus a second possibility is to situate it at the beginning of the schooling questions.

However, if the recommended rewording of the school attendance inquiry is implemented, it may be sufficient to situate it in the same position as in the NCT.

**Q.28** Question 28 should be reworded by inverting the present order of the terms. Also a question qualifier should be added identifying qualifications obtained from "secondary (high) schools, trade schools and other postsecondary educational institutions". This reinforces the idea that secondary graduation certificates are to be included. Some consideration might also be given to placing the "No-skip to Question 30" answer at the end of the response categories.

There are, however, several serious drawbacks to this option. First, it would break the chain of the hierarchy and force persons with no educational qualifications to consider all of the degree, certificate and diploma categories before arriving at their answer box. Second, there may be a tendency to over-report the first response category. In addition it may also increase non-response (ie persons with no qualifications would probably stop after seeing secondary school graduation certificate and not even reach the "None" response category). It may also increase invalid response patterns such as persons marking all of the response categories with an "X" meaning to indicate that these categories do not apply to them. Keeping the None" response as the first category is thus the preferred and recommended option.

**Q.29** It is recommended that the term "or training" be added to the response area and that the term "carpentry" be added to the examples. Finally, it is recommended that the residual category be reworded by substituting "qualification" for diploma.

A summary mock-up incorporating the above recommendations is shown in Appendix II.

#### **4. Conclusion**

We can conclude from this analysis that in spite of evidence of response error in two out of the six education questions and of high non-response to another, the education module as a whole still generates a fairly reliable set of estimates for education parameters. With the modifications recommended we feel confident that the 1991 Census education module will produce reliable and valid estimates for the many uses and applications of schooling, major field of study and current school attendance data.

# APPENDIX I

## NCT SUMMARY TABLES 1-5 AND CHARTS

TABLE 1. SUMMARY OF NON-RESPONSE RATES OF THE 1988 NCT EDUCATION VARIABLES, CANADA AND REGIONS

VARIABLE	Non-Response Rates By Region				
	Canada	East	Quebec	Ontario	West
	%				
Elementary-Secondary	11	8	19	7	9
University	5	4	4	4	7
Non-University	8	8	7	8	10
School Attendance	6	6	5	5	8
Highest Degree, Cert.	7	7	5	6	9
Major Field of Study* by Degree, Cert.	9	11	12	8	8
Trades	17	15	24	16	13
Non-University	9	11	10	9	8
Cert. below BA	7	10	10	4	6
Bachelor	2	3	3	2	2
Cert. above BA	4	6	4	4	2
Medical	0	5	0	0	0
Masters	2	0	4	1	2
Doctorate	4	2	12	0	6

\* Non-response rates for persons reporting postsecondary qualifications.

TABLE 2A. POPULATION 15 YEARS AND OVER BY HIGHEST LEVEL OF SCHOOLING,  
1986 CENSUS, 1988 NCT AND 1988 LFS, (1) CANADA.

Highest Level of Schooling	1986 (2) <u>Census</u>		1988 (6) <u>NCT</u>		1988 (1) <u>LFS</u>	
	N	%	N	%	N	%
Less than Grade 9	3,393,725	17.3	2,543,000	14	2,964,000	15
Grade 9-13 No Cert.	5,321,230	27.1	4,498,000	24	4,274,000	21
Grade 9-13 Sec. Cert.	2,511,220	12.8	2,476,000	14	4,104,000	21
Trades Only (3)	601,500	3.1	527,000	3	636,000	3
Other Non- Univ. No Cert.	1,335,720	6.8	1,636,000	9	1,767,000	9
Other Non- University Cert. (4)	2,853,570	14.5	2,811,000	15	3,645,000	18
Univ. No Degree (5)	1,738,665	8.9	1,865,000	10	(472,000)7	2
Univ. with Degree	1,878,485	9.6	2,044,000	11	2,134,000	11
Total 15	19,634,105	100.0	18,403,000	100	19,996,000	100

- Notes:
1. Special LFS Educational Attainment Survey, December 1988
  2. Includes Yukon and Northwest Territories
  3. Trades Certificate Holders without further schooling
  4. Includes both Trades and Other Non-university Certificate holders with further postsecondary schooling.
  5. Includes persons with certificates below the bachelor levels
  6. Excludes Blank and Invalid responses
  7. Includes university certificates below bachelor only.

TABLE 2B. POPULATION 15 YEARS AND OVER BY HIGHEST LEVEL OF SCHOOLING,  
1986 CENSUS AND 1988 NCT, QUEBEC.

Highest level of Schooling	1986 Census		1988 NCT	
	N	%	N	%
Less Than Gr. 9	1,223,120	23.9	934,000	20
Gr. 9-13, No Cert.	1,013,365	19.8	800,000	17
Gr. 9-13, Sec. Cert.	803,685	15.7	792,000	17
Trades Only	213,905	4.2	191,000	4
Other Non-Univ., No Cert.	391,415	7.7	497,000	11
Other Non-Univ. Cert.	654,530	12.8	630,000	13
Univ. No Degree	375,560	7.3	377,000	8
Univ. Degree	439,410	8.6	470,000	10
Total 15 and Over	5,114,990	100.0	4,691,000	100

TABLE 3A. POPULATION 15 YEARS AND OVER BY HIGHEST DEGREE, CERTIFICATE OR DIPLOMA, 1986 CENSUS AND 1988 NCT, CANADA.

Highest Degree Certificate or Diploma	1986 Census		1988 NCT	
	N	%	N	%
None	9,384,100	47.8	7,981,000	43
Secondary Cert.	3,985,820	20.3	4,029,000	22
Trades Cert.	1,969,650	10.0	1,954,000	11
Other Non-Univ. Cert.	2,034,465	10.4	2,236,000	12
Univ. Cert. below BA	381,580	1.9	402,000	2
Bachelor's degree	1,254,250	6.4	1,366,000	7
Univ. Cert. above BA	189,000	1.0	211,000	1
Medical	74,945	0.4	90,000	-
Master's degree	293,335	1.5	328,000	1
Earned doctorate	66,955	0.3	78,000	0.4
Total	19,634,1000	100.0	18,674,627	100.0



TABLE 3B. POPULATION 15 YEARS AND OVER BY HIGHEST DEGREE, CERTIFICATE OR DIPLOMA, 1986 CENSUS AND 1988 NCT, QUEBEC.

Highest Degree Certificate or Diploma	1986 Census		1988 NCT	
	N	%	N	%
None	2,345,440	45.9	2,074,000	42
Secondary Cert.	1,182,990	23.1	1,181,000	24
Trades Cert.	491,880	9.6	463,000	9
Other Non-Univ. Cert.	526,270	10.3	608,000	12
Univ. Cert. below BA	129,000	2.5	129,000	3
Bachelor's degree	285,575	5.6	308,000	6
Univ. Cert. above BA	50,160	1.0	48,000	1
Medical	19,175	0.4	23,000	-
Master's degree	69,295	1.4	85,000	2
Earned doctorate	15,200	0.3	17,000	-
Total	5,114,995	100.0	4,936,000	100

TABLE 4. POPULATION 15-24 YEARS OF AGE ATTENDING SCHOOL FULL-TIME, CANADA AND REGIONS, LABOUR FORCE SURVEY (LFS) AND NATIONAL CENSUS TEST NCT, NOVEMBER 1988

REGION AND AGE GROUP	LFS		NCT CENSUS	
	N	%	N	%
<b>CANADA</b>				
15-24				
Attending FT	1,834,000	47	1,437,000	39
Total	3,906,000		3,652,000	
15-19				
Attending FT	1,406,000	77	989,000	58
Total	1,831,000		1,697,000	
20-24				
Attending FT	428,000	21	449,000	23
Total	2,076,000		1,955,000	
<b>EAST</b>				
15-24				
Attending FT	186,000	47	126,000	35
Total	392,000		363,000	
<b>QUEBEC</b>				
15-24				
Attending FT	433,000	45	408,000	44
Total	970,000		920,000	
15-19				
Attending FT	322,000	73	272,000	66
Total	439,000		414,000	
20-24				
Attending FT	110,000	21	136,000	27
Total	531,000		506,000	
<b>ONTARIO</b>				
15-24				
Attending FT	741,000	51	563,000	41
Total	1,443,000		1,363,000	
15-19				
Attending FT	564,000	84	381,000	61
Total	675,000		628,000	
20-24				
Attending FT	177,000	23	182,000	25
Total	767,000		735,000	
<b>WEST</b>				
15-24				
Attending FT	474,000	43	340,000	34
Total	1,103,000		1,007,000	

Source: LFS - The labour force, November 1988, Table 9 Catalogue 71-001, December 1988.

1. Excludes non-responses.

TABLE 5. POPULATION 15 YEARS AND OVER BY AGE GROUPS AND SCHOOL ATTENDANCE,  
1981 CENSUS AND 1988 NATIONAL CENSUS TEST, CANADA

AGE AND SCHOOL ATTENDANCE	1981 CENSUS		1988 NCT	
	N	%	N	%
CANADA				
15 Years and over				
Attending FT	2,170,820	11.7	1,831,000	9.7
Attending PT	1,076,610	5.8	733,000	3.9
Not Attending	15,361,855	82.5	16,312,000	86.4
Total	18,609,285	100.0	18,876,000	100.0
15-19 Years				
Attending FT	1,517,720	65.9	989,000	58.3
Attending PT	62,620	2.7	47,000	2.8
Not Attending	723,240	31.4	661,000	39.0
Total	2,303,580	100.0	1,697,000	100.0
20-24 Years				
Attending FT	433,430	18.6	449,000	23.0
Attending PT	208,135	8.9	108,000	5.5
Not Attending	1,692,865	72.5	1,398,000	71.5
Total	2,334,425	100.0	1,955,000	100.0
25-44 Years				
Attending FT	189,220	2.6	261,000	3.2
Attending PT	650,885	9.1	479,000	5.9
Not Attending	6,316,655	88.3	7,387,000	90.9
Total	7,156,765	100.0	8,127,000	100.0
45-64 Years				
Attending FT	25,165	0.5	79,000	1.7
Attending PT	141,440	3.1	87,000	1.8
Not Attending	4,463,300	96.4	4,542,000	96.5
Total	4,629,910	100.0	4,708,000	100.0
65 Years and Over				
Attending FT	5,285	0.4	54,000	2.3
Attending PT	13,530	0.6	12,000	0.5
Not Attending	2,165,805	99.1	2,324,000	97.2
Total	2,184,620	100.0	2,390,000	100.0

CHART 1.

Full-time School Attendance in the 45-64 and 65 Years and Over Age Groups, Canada, 1981 Census and 1988 NCT

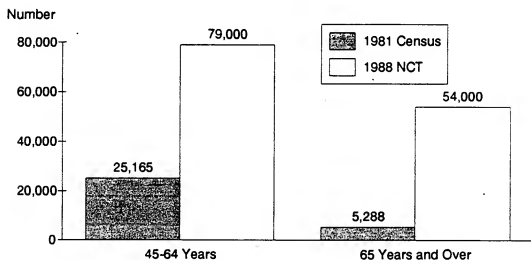
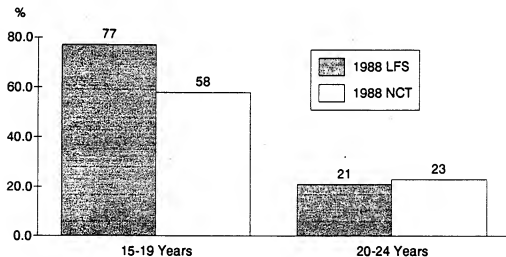


CHART 2

Full-time School Attendance in the 15-19 and 20-24 Year Age Groups, Canada, November 1988 LFS and 1988 NCT



## Census Questions on School Attendance

1971

School or university.

19. Have you attended school or university since last September?

☐ Yes, full-time    ☒ Yes, part-time, day or evening    ☐ No

Response order placed the "yes" answer first.

1981

Replaces "educational institutions".

36. Have you attended a school, college or university at any time since last September? (Include attendance at elementary or secondary schools, business or trade schools, community colleges, institutes of technology, CEGEPs, etc.)

☒ Mark one box only

01 ☐ No  
02 ☐ Yes, full-time  
03 ☐ Yes, part-time, day or evening

Part (b) dropped in 1981.

1976

8. Have you attended an educational institution at any time since last September?

☐ No → Skip to Question 10  
☐ Yes, full-time  
☐ Yes, part-time, day or evening

What kind of educational institution was it? ☒

☐ Elementary or secondary  
☐ University  
☐ Post-secondary non-university

Some respondents took this term to mean only "institution of higher learning".

New in 1976.

1988 NCT

27. Has this person attended a school, college or university at any time in the past two months, that is, since September?

*Include only courses which can be used as credits towards a certificate, diploma or degree at secondary schools, business or trade schools, community colleges, institutes of technology, CEGEPs, etc.*

*Mark one circle only.*

- 1 ☐ Yes, full time  
2 ☐ Yes, part time, day or evening  
3 ☐ No, did not attend in past two months

## Questions on Elementary-Secondary Schooling, 1988 NCT and 1986 Census

1988 NCT**EDUCATION**

24. What is the highest grade (or year) of secondary (high school) or elementary school this person ever attended?

☐ Highest grade or year  
(1 to 13) of secondary or  
elementary school

OR

94 ☐ Never attended school or  
attended kindergarten only

1986 CENSUS

21. (a) What is the highest grade (or year) of secondary (high) or elementary school you ever attended? (See Guide)

62 ☐ Enter highest grade or year (1 to 13)  
of secondary or elementary school

OR

63 ☐ Never attended school or attended kindergarten only

(b) How many years of education have you ever completed at university?

64 ☐ None

65 ☐ Less than 1 year (of completed courses)

66 ☐ Enter number of completed years at university

Questions au sujet de la scolarité primaire ou secondaire, TRN de 1988 et Recensement de 1986

TRN de 1988

**SCOLARITÉ**

24. Jusqu'en quelle année cette personne a-t-elle fréquenté l'école secondaire ou primaire?

- ☐ Plus haut niveau (1<sup>re</sup> à 13<sup>e</sup> année, terminée ou non) à l'école secondaire ou primaire  
OU  
94 ☐ Aucune scolarité ou uniquement l'école maternelle

Recensement de 1986

21. a) Jusqu'en quelle année (sans l'avoir nécessairement terminée) avez-vous fréquenté l'école secondaire ou primaire?  
(Consultez le Guide)

62 ☐ Inscrire le plus haut niveau (1<sup>re</sup> à 13<sup>e</sup> année, terminée ou non) à l'école secondaire ou primaire

OU

63 ☐ Aucune scolarité ou uniquement l'école maternelle

b) Combien d'années d'études avez-vous terminées à l'université?

64 ☐ Aucune

65 ☐ Moins d'une année (de cours terminés)

66 ☐ Inscrire le nombre d'années terminées à l'université

## APPENDIX II

### SUMMARY OF RECOMMENDATIONS FOR QUESTION REWORDING IN ENGLISH AND FRENCH



EDUCATION - RECOMMENDED 1991 CENSUS QUESTIONS

24. What is the **highest** grade (or year) of **secondary** (high school) or **elementary** school this person ever attended?

*Enter highest number (1 to 13) of grades or years, excluding kindergarten.*

☐ Enter highest number (1 to 13) of grades or years of secondary and/or elementary school

OR

- 94 ☐ Never attended school or attended kindergarten only

25. How many years of education has this person completed at **university**?

- 95 ☐ None

- 96 ☐ Less than 1 year (of completed courses)

☐ Number of completed years at university

26. How many years of schooling has this person ever completed at an institution **other than** a university, a secondary (high school) or an elementary school?

*Include years of schooling at community colleges, institutes of technology, CEGEPs (general and professional), private trade schools or private business colleges, diploma schools of nursing, etc.*

- 97 ☐ None

- 98 ☐ Less than 1 year (of completed courses)

☐ Number of completed years at institutions such as community colleges, trade schools, CEGEPs, etc.

27. In the **past nine months** (that is, since last September) was this person attending a school, college or university? (Include attendance at elementary or secondary schools, business or trade schools, community colleges, institutes of technology, CEGEPs, etc.)

*At the secondary and the postsecondary level, include attendance only for courses which can be used as credits towards a certificate, diploma or degree.*

*Mark one circle only.*

- 1 ☐ No, did not attend in past nine months

- 2 ☐ Yes, full time

- 3 ☐ Yes, part time, day or evening

28. What certificates, diplomas or degrees has this person ever obtained?

*Include all qualifications obtained from secondary (high) schools, and trade schools, and other postsecondary educational institutions.*

Mark as many circles as applicable.

- 01 ☐ None - Skip to Question 30
- 02 ☐ Secondary/high school graduation certificate or completion
- 03 ☐ Trades certificate or diploma
- 04 ☐ Other non-university certificate or diploma (obtained at community college, CEGEP, institute of technology, etc.)
- 05 ☐ University certificate or diploma below bachelor level
- 06 ☐ Bachelor's degree(s) (e.g., B.A., B.Sc., B.A.Sc., LL.B.)
- 07 ☐ University certificate or diploma above bachelor level
- 08 ☐ Master's degree(s) (e.g., M.A., M.Sc., M.Ed.)
- 09 ☐ Degree in medicine, dentistry, veterinary medicine or optometry (M.D., D.D.S., D.M.D., D.V.M., O.D.)
- 10 ☐ Earned doctorate (e.g., Ph.D., D.Sc., D.Ed.)

29. What was the major field of study or training of this person's highest degree, certificate or diploma (excluding secondary or high school graduation certificate)?

(For example, accounting, carpentry, civil engineering, history, legal secretary, welding)

Major field of study or training


OR

- 1 ☐ This person's highest qualification is a secondary/high school graduation certificate

# OPTION I

## SCOLARITÉ - SOMMAIRE DES CHANGEMENTS RECOMMANDÉS

24. Jusqu'en quelle année (sans l'avoir nécessairement terminée) cette personne a-t-elle fréquenté l'école **secondaire ou primaire**?

Inscrire le plus haut niveau (1<sup>re</sup> à 13<sup>e</sup> année), excluant l'école maternelle.

☐

Inscrire le plus haut niveau (1<sup>re</sup> à 13<sup>e</sup> année, terminée ou non) à l'école secondaire ou primaire

OU

☐

Aucune scolarité ou uniquement l'école maternelle

25. Combien d'années d'études cette personne a-t-elle terminées à l'université?

☐

Aucune

☐

Moins d'une années (de cours terminés)

☐

Nombre d'années terminées à l'université

26. Combien d'années d'études cette personne a-t-elle terminées dans un établissement **autre qu'une université** ou une école secondaire ou primaire?

Comptez les années d'études dans des collèges communautaires, instituts techniques, cégeps (enseignement général et professionnel), écoles de métiers et collèges commerciaux privés, écoles de sciences infirmières décernant un diplôme, etc.

☐

Aucune

☐

Moins d'une années (de cours terminés)

☐

Nombre d'années terminées dans des établissements tels les collèges communautaires, les écoles de métiers et les cégeps

27. Depuis les neuf derniers mois (c'est-à-dire depuis septembre dernier), cette personne a-t-elle fréquenté une école, un collège ou une université? (Inclure la fréquentation à une école élémentaire ou secondaire, d'une école de commerce ou de métiers, d'un collège communautaire, d'un Institut technique, d'un cégep, etc.)

Au niveau secondaire et post-secondaire, inclure que les cours qui peuvent être utilisés comme crédits en vue de l'obtention d'un certificat, diplôme ou grade.

Cochez un seul cercle.

☐

Non, n'a fréquenté aucun de ces établissements au cours des neuf derniers mois

☐

Oui, à plein temps

☐

Oui, à temps partiel, le jour ou le soir

28. Quels certificats diplômes ou grades cette personne détient-elle?

*Inscrivez toutes les qualifications obtenues, d'études secondaires, de certificats de métier, et d'autres institutions post-secondaires.*

Cochez plus d'un cercle, s'il y a lieu.

- 01 ☐ Aucun - Passez à la question 30
- 02 ☐ Certificat d'études secondaires ou l'équivalent
- 03 ☐ Certificat ou diplôme de métier
- 04 ☐ Autre certificat ou diplôme non universitaire (obtenu, par ex., d'un collège communautaire, cégep, institut technique)
- 05 ☐ Certificat ou diplôme universitaire inférieur au baccalauréat
- 06 ☐ Baccalauréat(s) (par ex., B.A., B.Sc., B.Sc.A., LL.B.)
- 07 ☐ Certificat ou diplôme universitaire supérieur au baccalauréat
- 08 ☐ Maîtrise(s) (par ex., M.A., M.Sc., M.Éd.)
- 09 ☐ Diplôme en médecine, en art dentaire, en médecine vétérinaire ou en optométrie (M.D., D.D.S., D.M.D., D.M.V., O.D.)
- 10 ☐ Doctorat acquis (par ex., Ph.D., D.Sc., D.Éd.)

29. Quel était le principal domaine d'études ou de formation du plus haut grade, certificat ou diplôme de cette personne (sans compter les certificats d'études secondaires)?

(Par exemple, comptabilité, génie civil, histoire, menuiserie, secrétariat juridique, soudure)

Principal domaine d'études ou de formation


OU

- 1 ☐ La plus haute qualification de cette personne est un certification d'études secondaires

## APPENDIX III

### INVENTORY OF NCT TABULATIONS

## INVENTORY OF NCT TABULATUIONS

### FREQUENCIES FOR CHECKING TABS AND POSSIBLE RESPONSES

Distribution of Unweighted Responses for Highest Degree (Q24), for Canada - **NCTFREQ**

Distribution of Unweighted Responses for Years of University (Q25), for Canada - **NCTFREQ**

Distribution of Unweighted Responses for Years of Non-university (Q26), for Canada - **NCTFREQ**

Distribution of Unweighted Responses for School Attendance (Q27), for Canada - **NCTFREQ**

Population 15 Years and Over Showing Distribution of Weighted Responses for School Attendance (Q27), for Canada - **FQ273039**

Population 15 Years and Over Showing Distribution of Weighted Responses for Employment Status (Q30), for Canada - **FQ273039**

Population 15 Years and Over Showing Distribution of Weighted Responses for Work Experience (DVQ39), for Canada - **FQ273039**

### SCHOOL ATTENDANCE

Sex by Age, Showing School Attendance, for Canada and Regions - **ATTEND**

Sex by Age and School Attendance, Showing Highest Degree, Certificate or Diploma, for Canada and Regions - **Q27DEG**

Population 15 years and Over by Sex and Age, Showing Q39 Flag Conflicts With Q27, for Canada and Regions - **LK2739**

Sex by Age and School Attendance, Showing Highest Level of Schooling, for Canada and Regions - **Q27HLOS**

Sex by Age and School Attendance (Q27), Showing Work Experience (Q39 - derived var. DVQ39), for Canada and Regions - **Q27Q39**

Sex by Age, School Attendance (Q27) and Current Employment Status (Q39), Showing Work Experience (Q39 (DVQ39)), for Canada - **Q273930**

### NON-RESPONSE

Non-response Rate for Highest Grade of Elementary or Secondary, for Canada and Regions - **BLANKS3**

Non-response Rate for Years Completed at University, for Canada and Regions - **BLANKS3**

Non-response Rate for Years Completed at Non-university, for Canada and Regions - **BLANKS3**

Non-response Rate for School Attendance, for Canada and Regions - **BLANKS3**

Non-response Rate for Highest Degree, for Canada and Regions - **BLANKS3**

Sex by Age, Q29b and Highest Degree, Certificate or Diploma, Showing Major Field of Study (Response/Non-response), for Canada and Regions - **MFSBLANK**

Sex by Age, Q29b and Major Field of Study (Response/Non-response), Showing Highest Degree, Certificate or Diploma, for Canada and Regions - **MFSBLNK2**

## **EDITS**

Population 15 Years and Over by Sex and Age, Showing Inconsistency Between Highest Grade and Highest Degree, for Canada and Regions - **EDITS**

Population 15 Years and Over by Sex and Age, Showing Inconsistency Between Highest Grade and School Attendance, for Canada and Regions - **EDITS**

Population 15 Years and Over by Sex and Age, Showing Inconsistency Between Years of University and Highest Degree, for Canada and Regions - **EDITS**

Population 15 Years and Over by Sex and Age, Showing Inconsistency Between Years of Non-university and Highest Degree, for Canada and Regions - **EDITS**

## **MAJOR FIELD OF STUDY**

Dump of Major Field of Study by Highest Degree - **MFSDEG**

Dump of Major Field of Study for Highest Degree = Medical, Showing Years of University, Years of Non-university and Occupation, for Canada - **MFSMED**

## **HIGHEST DEGREE**

Sex by Age and Highest Diploma is Secondary (Q29b), Showing Highest Degree, for Canada and Regions - **Q29BDEG**

## **HIGHEST GRADE**

Population 15 Years and Over by Sex and Age, Showing Highest Grade of Elementary or Secondary Schooling, Canada and Regions - **SINGLYRS**

## **YEARS OF UNIVERSITY**

Population 15 Years and Over by Sex and Age, Years Completed at University, Canada and Regions - **SINGLYRS**

## **YEARS OF NON UNIVERSITY**

Population 15 Years and Over by Sex and Age, Years Completed at Non-university, Canada and Regions - **SINGLYRS**

C.2



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